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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,003	11/19/2003	Tomasz Slawinski	224945	7592

23460 7590 04/19/2006

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EXAMINER	
RIVELL, JOHN A	

ART UNIT	PAPER NUMBER
3753	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,003	SLAWINSKI ET AL.	
	Examiner	Art Unit	
	John Rivell	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/19/03 (application)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *28* is/are allowed.

6)☒ Claim(s) *1-10,12,13,16,17,19-24 and 27* is/are rejected.

7)☒ Claim(s) *11,14,15,18,25 and 26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *08092004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 1-28 are pending.

The disclosure is objected to because of the following informalities: The description of the operation at paragraphs [0043] and [0044] appears to be incorrect. For example, the disclosure in paragraph [0043] discusses the operation when no current is applied to the coil. In this discussion the description of fluid traveling

> "through the pilot hole 99, and into the passageway 89 of the upper housing. This flow, also referred to as the "pilot flow", causes the fluid pressure in the passageway 89 and the chamber 133 of the spool to drop below the fluid pressure at the inlet port 126. The resulting differential pressure across the spool 130 produces an upward force on the spool 130. When this upward force is sufficient to overcome the resiliency of the spring 150 (i.e. 105), the spool 130 moves upward until communication is established between the inlet port 126 and the discharge port 127"

is not necessarily agreed with. This action is believed to occur after the coil is actuated. As set forth in paragraph [0044] when current is applied to the coil the pilot "poppet" 117 may open now causing the above noted "pressure differential" to occur resulting in movement of the main spool 130 to an open position.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5-10, 12, 13, 16, 19, 21-24 and 27 are rejected under 35 U.S.C. §102 (b) as being anticipated by Kramer et al (U.S. Pat. No. 4,679,765).

The patent to Kramer et al ('765), in figure 1, (an exploded view is provided as Appendix A) discloses a "filter (read at plug 54) for a valve (main spool 16), the valve including a bore (39) for receiving the filter (54) and an orifice (58) for accommodating a fluid flow therethrough, the filter (54) comprising: an entrance head (at land 60), the entrance head configured to be in predetermined spaced relationship with the bore (36) of the valve (16) when disposed therein to define a filter entrance (see in particular column 3, lines 46-51), the filter entrance being sized to prevent particles of a predetermined size from entering the filter entrance; and a body portion (the apparent annular channel which is immediately downstream of land 60 and the gap formed between land 60 and bore 36) cooperating with the bore (36) to define a fluid passage, the fluid passage (e.g. annular channel) having an exit port which is communicable with the orifice (at 58)" as recited in claim 1.

Regarding claim 2, in Kramer et al ('765), "the body portion includes a relief element (e.g. the annular area forming the annular channel) for defining the fluid passage" as recited.

Regarding claim 5, in Kramer et al ('765), "the body portion includes a seal ring" read at the upper land 57 and the threaded sealed reception of plug 54 within bore 36, as recited.

Regarding claim 6, in Kramer et al ('765), "the body portion includes a first section (at the apparent annular channel) at least a portion of which is smaller than the entrance head (at land 60) to define the fluid passage" as recited.

Regarding claim 7, in Kramer et al ('765), "the body portion includes a second section (above land 57) adjacent to the first section, the second section being smaller than the first section to define a step (e.g. the upper surface of land 57) therebetween" as recited.

Regarding claim 8, in Kramer et al ('765), "the exit port (communicating with orifice 58) is disposed in the body portion" as recited.

Regarding claim 9, in Kramer et al ('765), "the body portion includes a hole (e.g. orifice 58) in communication with the exit port" as recited.

Regarding claim 10, in Kramer et al ('765), "a mounting flange" is read at the very lowest thread on the exterior of the plug 54 in threaded contact with the interior bore 36.

Regarding claim 12, in Kramer et al ('765), the body portion defines the orifice (58)" as recited.

Regarding claim 13, the patent to Kramer et al ('765) discloses a "valve comprising: an input port (30) for connection to a pressure source (pump 32) to develop a fluid flow; a bore (36) in communication with the input port; an orifice (58) for accommodating the fluid flow therethrough, the orifice (58) disposed in the bore; and a filter (plug 54) disposed in the bore (36), the filter (54) including an entrance head (at land 60) and a body portion (immediately downstream of land 60), the entrance head (60) in predetermined spaced relationship with the bore (36) of the valve to define a

filter entrance (see column 3, lines 46-51), the filter entrance being sized to prevent particles of a predetermined size in the fluid flow from entering the filter entrance, the body portion cooperating with the bore to define a fluid passage (at the apparent annular channel immediately downstream of land 60), and the fluid passage having an exit port which is communicable with the orifice (58)" as recited.

Regarding claim 16, in Kramer et al ('765), "the valve comprises a two-stage valve" as recited, as the term "two stage" is defined in the specification.

Regarding claim 19, in Kramer et al ('765), "the body portion of the filter (54) includes a relief element (e.g. the area forming the annular channel) for defining the fluid passage" as recited.

Regarding claim 21, in Kramer et al ('765), "the body portion of the filter (54) includes a seal ring (read on the upper land 57 and the threaded sealed reception of the plug 54 within the bore 36 of the valve 16" disposed in sealing engagement with the bore (36)" as recited.

Regarding claim 22, in Kramer et al ('765), "the body portion of the filter (54) includes a first section (at the apparent annular channel) at least a portion of which is smaller than the entrance head (at land 60) to define the fluid passage" as recited.

Regarding claim 23, in Kramer et al ('765), "the body portion of t filter (54) includes a second section (above land 57) adjacent to the first section, the second section being smaller than the first section to define a step (e.g. the upper surface of land 57) therebetween" as recited.

Regarding claim 24, in Kramer et al ('765), "the exit port (communicating with orifice 58) is disposed in the body portion of the filter, and the body portion includes a hole (e.g. orifice 58) in communication with the exit port" as recited.

Regarding claim 27, in Kramer et al ('765), "the body portion of the filter (54) defines the orifice (58)" as recited.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3, 4, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al ('765).

The patent to Kramer et al ('765) discloses all the claimed features with the exception of having "the body portion includes a section that is generally polygonal and includes a plurality of rounded corners" (claim 3) in which "the rounded corners each have a radius that substantially conforms to a radius of the bore of the valve" (claim 4; claim 20 combined). The external shape pf the plug 54 of Kramer et al ('765) is believed to be circular.

It would have been an obvious matter of design choice to employ a "body portion (which) includes a section that is generally polygonal and includes a plurality of rounded

corners the rounded corners each (having) a radius that substantially conforms to a radius of the bore of the valve", since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. In re Dailey, 357 F.2d 669, 149 USPQ 457 (CCPA 1966). Here the differences merely involve the change in the external shape of the plug 54 of Kramer et al ('765).

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kramer et al ('765) in view of Bullard.

The patent to Kramer et al ('765) discloses all the claimed features including "a retainer (nut 24 and cap 22); an actuator assembly including..., a coil assembly (12), a pole piece (cap 20 of ferro-magnetic material), and an armature (18),... the armature including a rigid member (e.g. the upper end of poppet stem 46); a first housing (the upper and of plug 54), the first housing having a bore (48); a poppet (46) movably disposed within the bore of the first housing, the poppet in contacting relationship with the rigid member of the armature (18), the poppet having a head with a tip (at 51); a passageway (defined within seat 49), the poppet being movable such that the tip (at 51) of the poppet can be seated in the passageway (on seat 49); a second housing (outer sleeve 26) having a bore; a spool (valve 16) being movably disposed within the bore of the second housing (26)" as recited in claim 17, but lacks having an "actuator tube" containing the pole piece, armature and to which is mounted the retainer.

The patent to Bullard discloses that it is known in the art to employ an "actuator tube" at tubular member 16 containing a pole piece 21 armature 31 and to which is connected a retainer at nut 20 for the purpose of precluding fluid contact with the coil of the solenoid.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Kramer et al ('765), an actuator tube containing the pole piece armature and to which is connected the retainer of Kramer et al ('765) for the purpose of precluding fluid contact with the coil 12 as recognized by Bullard.

Claim 28 is allowed.

Claims 11, 14, 15, 18, 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

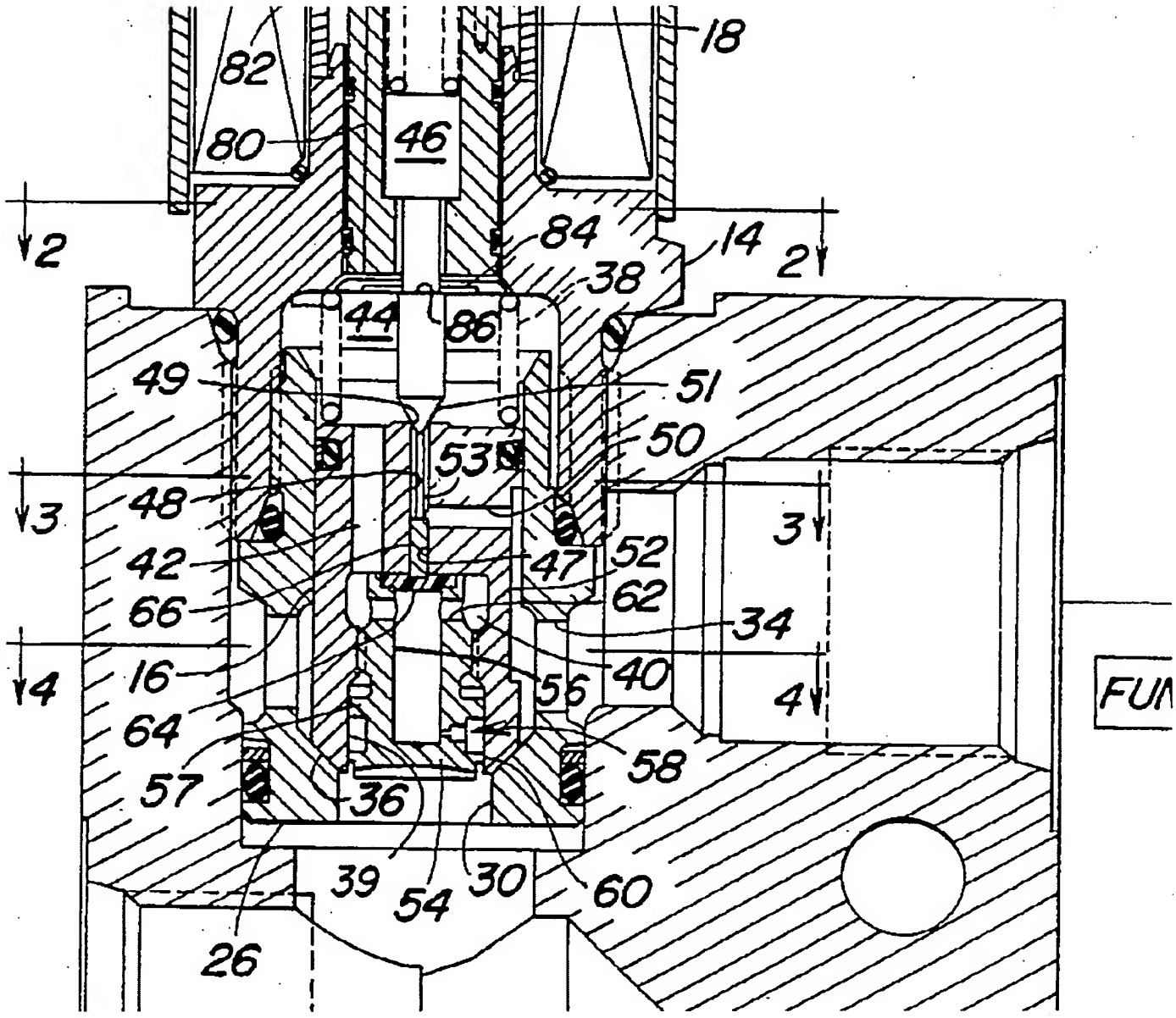
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John Rivell
Primary Examiner
Art Unit 3753

j.r.

APPENDIX A (Exploded view of Fig. 1 of U.S. Pat. No. 4,679,765)



JOHN RIVELL
PRIMARY EXAMINER
ART UNIT 347